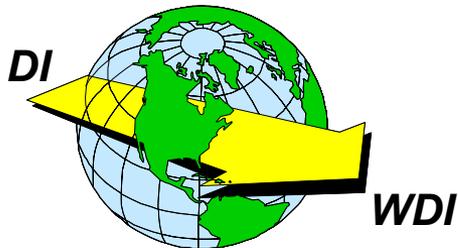


DataInterchange 4.1

Understanding the DTD Convert Process and
XML Dictionaries

*Maury
Griffith*

The Next Generation

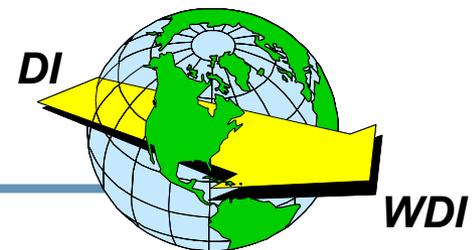


2002 User Conference

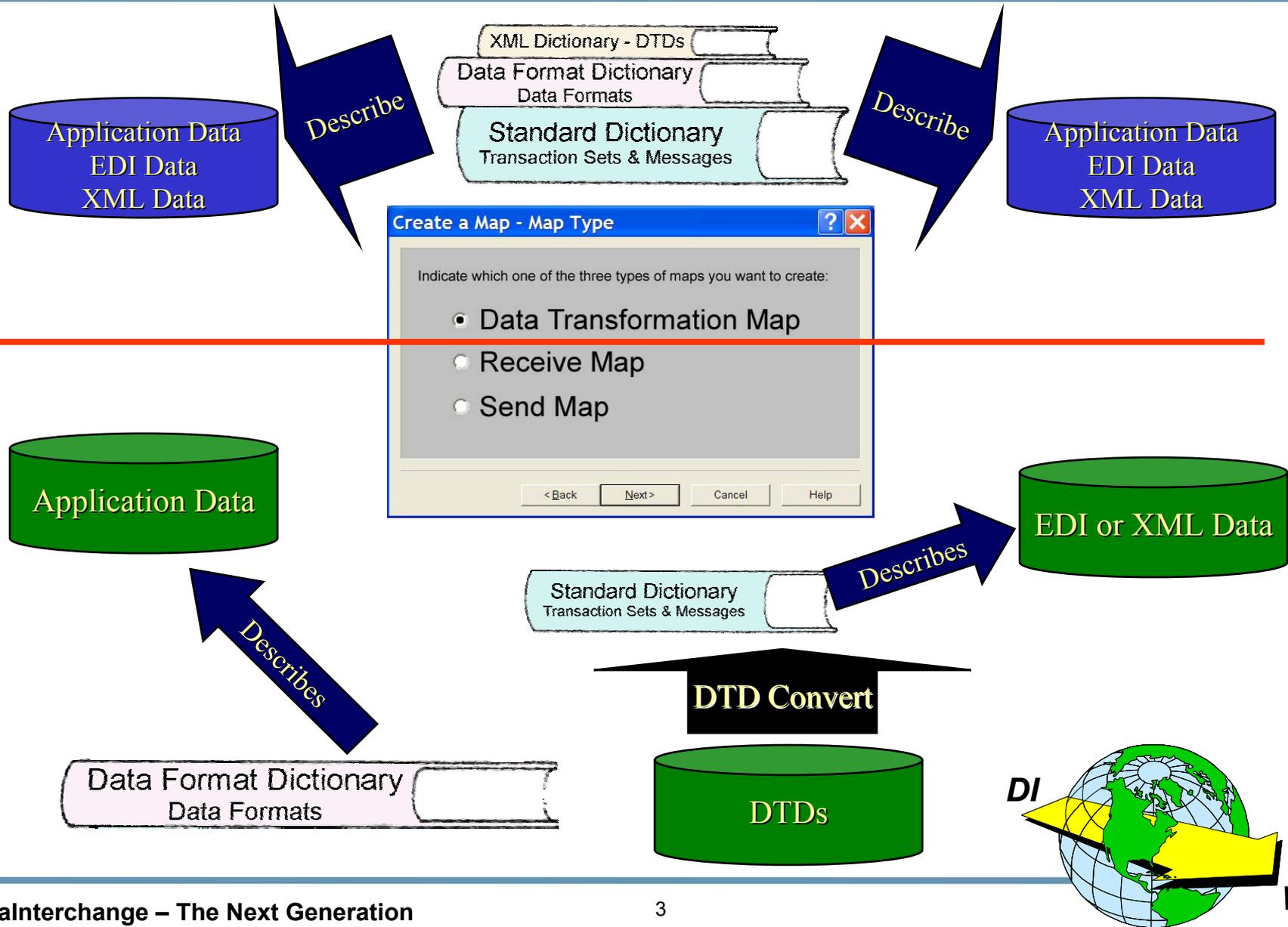
Objectives

Following successful completion of this module you will be able to:

- ★ **Establish the Send/Receive and Data Transformation environments required for XML translation.**
- ★ **Identify and distinguish the three types of dictionaries.**
- ★ **Create an XML standard and dictionary.**
- ★ **Import a DTD into an XML dictionary.**
- ★ **Know when you need to run DTD Convert.**
- ★ **Know how to use DTD Convert.**



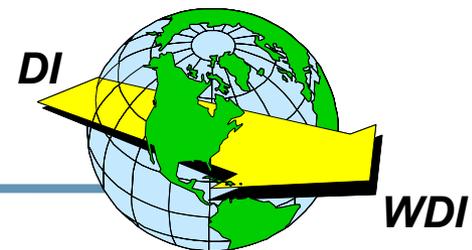
Dictionaries and Translation Types



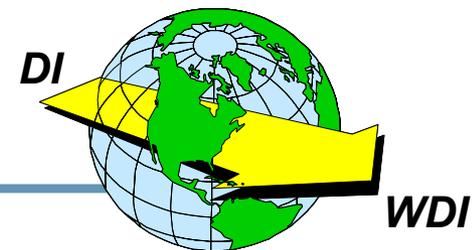
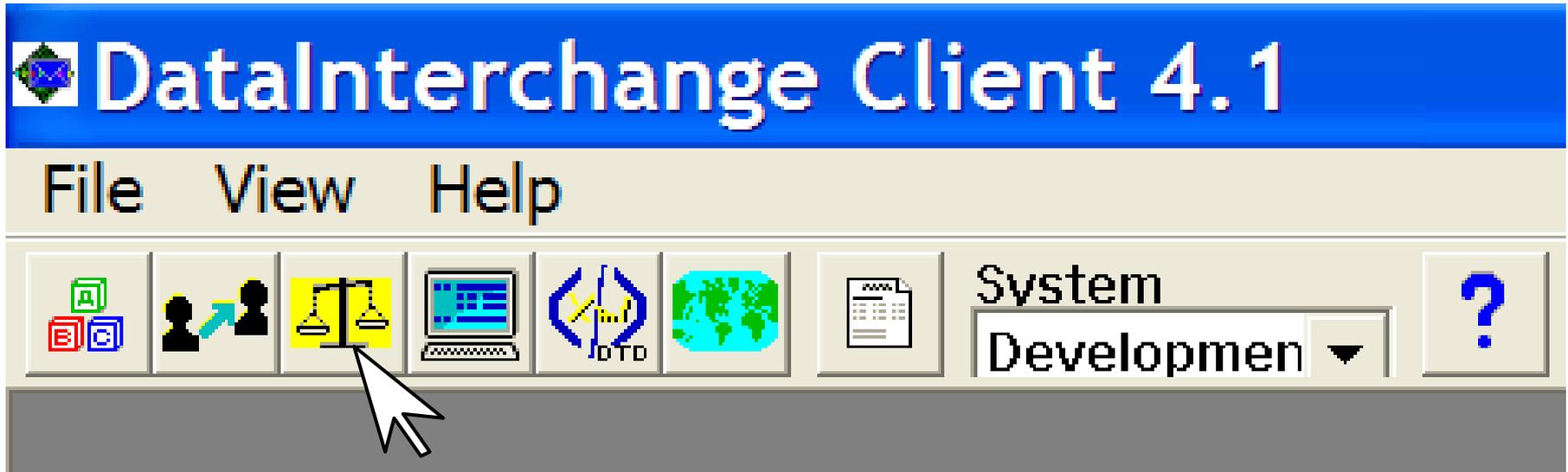
Dictionaries

Dictionaries describe the data being translated. There are three types of dictionaries:

- EDI Standard Dictionaries
- Data Format Dictionaries
- XML Dictionaries



EDI Standard Dictionaries

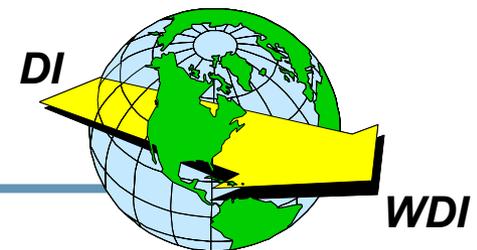


EDI Standard Dictionaries

The screenshot shows a software window titled "Development (EDI Standards) - Query: All". The window has a menu bar with "EDI Standard Dictionary", "Transactions", "Segments", "Data Elements", "Code Lists", "Envelope Standards", and "Envelope Control Strings". Below the menu bar is a table with the following data:

	Dictionary Name	Description	Version	Release	Industry	Agency	Purpose	Envelope Type
1	FIXED	DATAFORMAT					SAMPLE	F
5	UCSV4R1	UCS (Version 4	40	10	UCS	X		U
6	X12V3R2	ANSI ASC X12 S	03	02				X
7	X12V4R1	ANSI ASC X12 S	40	10		X		X

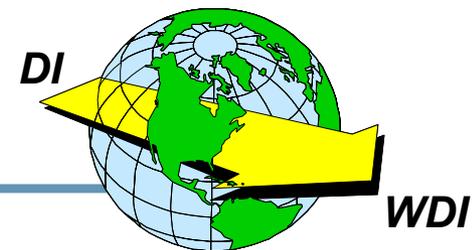
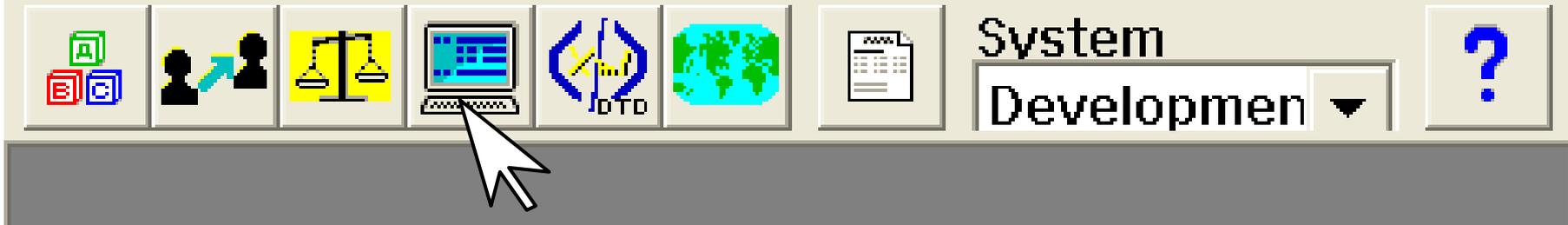
A yellow circle highlights the "EDI Standard Dictionary" menu item, and a mouse cursor points to it.



Data Format Dictionaries

DataInterchange Client 4.1

File View Help

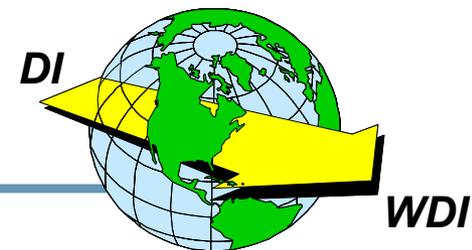


Data Format Dictionaries

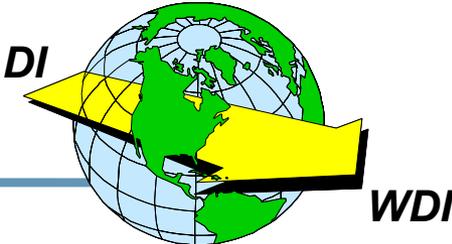
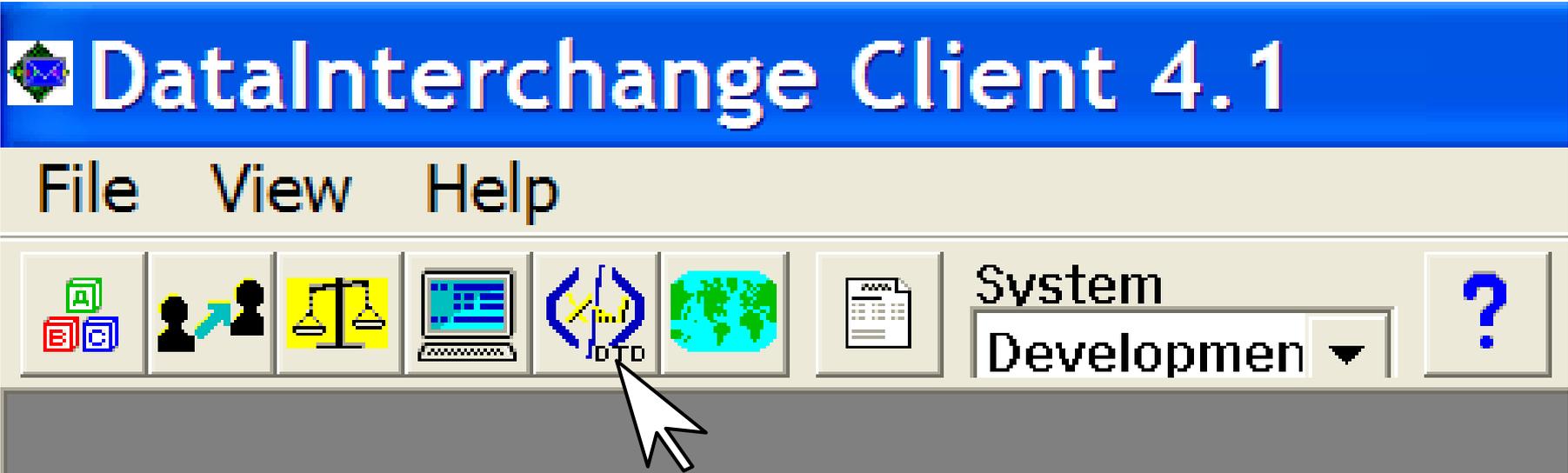
Development (Data Formats) - Quer...

Data Format Dictionary | Record ID Info | Data Formats | Loops | Records | Structures | Fields

	Dictionary Name	Description	Updated User ID	Updated Date/Time	Lock
1	350PEP		admin	04/12/2002 06:03:05 AM	No
2	AIRC856A_DICTIONA	AIR CANADA S1	admin	04/12/2002 06:03:01 AM	No
3	CLASS-ADF_DICTION	Class Purchase	admin	04/12/2002 06:01:47 AM	No
4	COMMON	Common dictiona	admin	04/12/2002 06:02:36 AM	No
5	SAMPLE		admin	04/12/2002 06:04:14 AM	No
6	SAMPLE-XML	Dictionary for Sa	admin	04/12/2002 06:04:15 AM	No



XML Dictionaries



Development (XML) - Query: All

XML Dictionary DTDs

Dictionary Name	D

Development - XML Dictionary - <untit...

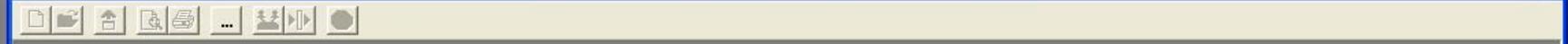
General Comments

Dictionary Name XMLSAMPLDIC

Description Sample XML Dictionary

Note: This Dictionary is used for Data Transformation mapping only and is not to be confused with the XML Dictionary produced by the DTD convert process.

Development (XML) - Query: All



XML Dictionary DTDs

Dictionary M	DTD Name	Sender ID Element	Root Element	Sender Qualifier Element	Lock	Updated Date/Time	Updated User ID
--------------	----------	-------------------	--------------	--------------------------	------	-------------------	-----------------

- File
- Actions
- View
- Window
- Help
- New Ctrl+N
- Open Ctrl+O
- Close
- Open Browser...
- Open Import File...
- Open Query List
- Open Report List
- Print... Ctrl+P
- Print Preview
- Print List...
- Properties...
- Exit

XML) - Query: All

ID Name	Sender ID Element	Root Element	Sender Qualifier Element	Lock	Updated Date/Time	Updated User ID
---------	-------------------	--------------	--------------------------	------	-------------------	-----------------

Select Import File

Look in: XML in DI

XMLSAMPL.DTD

File name: XMLSAMPL.DTD

Files of type: XML DTD File (*.dtd)

Open Cancel

Development (XML) - Query: All

XML Dictionary DTDs

Dictionary Name	DTD Name	Sender ID Element	Root Element	Sender

DataInterchange Client

File import completed successfully.

OK

Import XML DTD

DTD Name: XMLSAMPL

Dictionary Name: XMLSAMPLDIC

Root Element Name: Items

Description: Sample DTD

Import

Cancel

DTD Convert

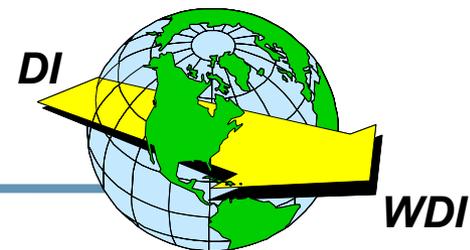
★ Required to perform XML translation using Send/Receive mapping

★ DTD Convert Produces:

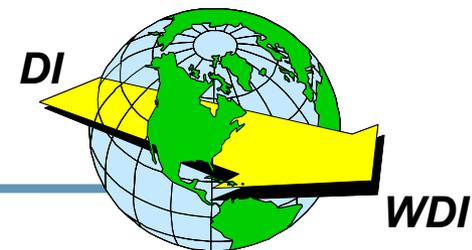
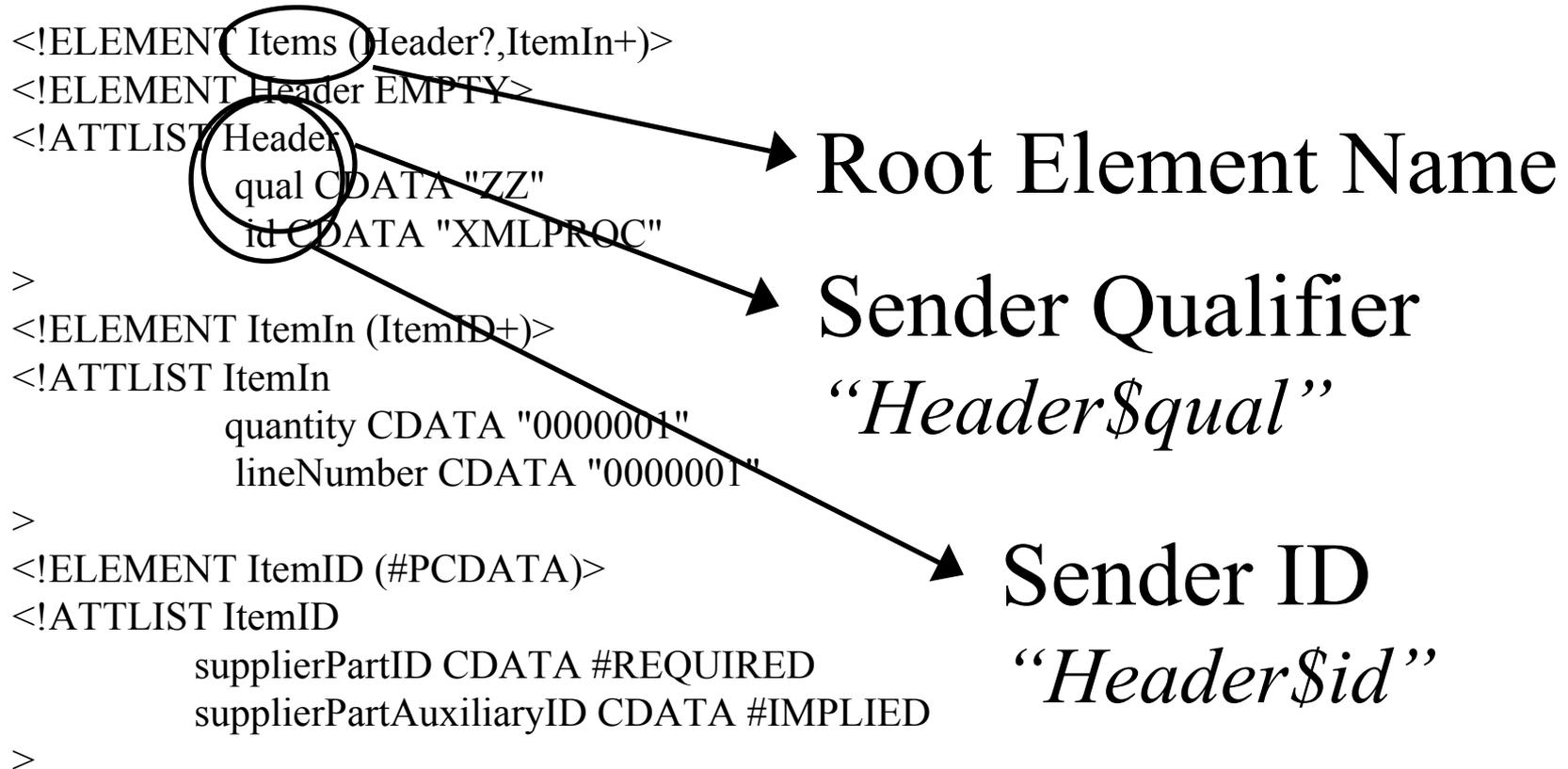
- EDI Standard Dictionary Import File
- XML Dictionary File (for Host processing)

★ Inputs:

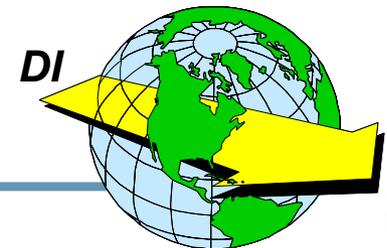
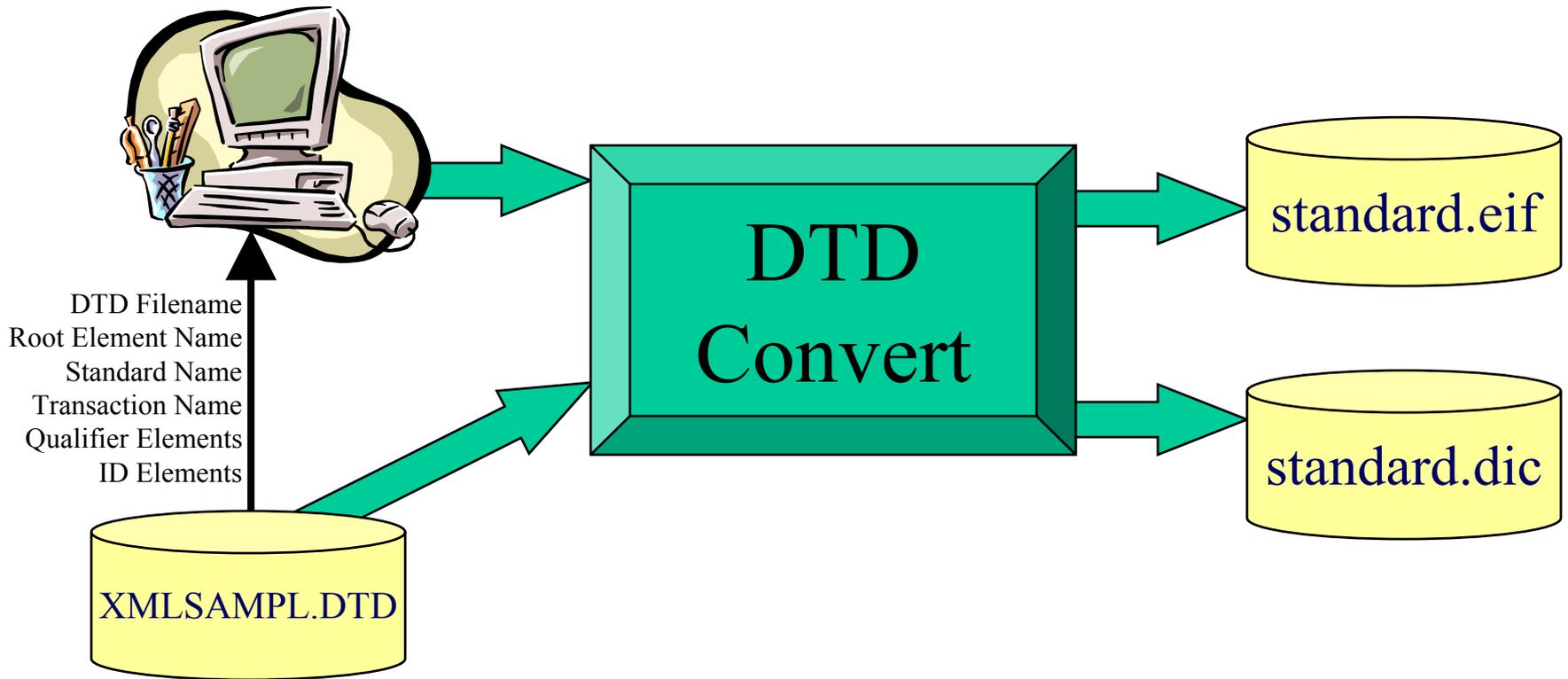
- DTD File
- Root Element Name
- Optional:
 - ✓ Names of Standard and Transaction to be Created
 - ✓ Names of Elements Containing Sender/Receiver Qualifiers and IDs



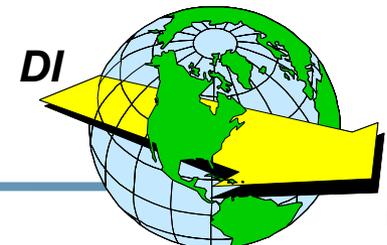
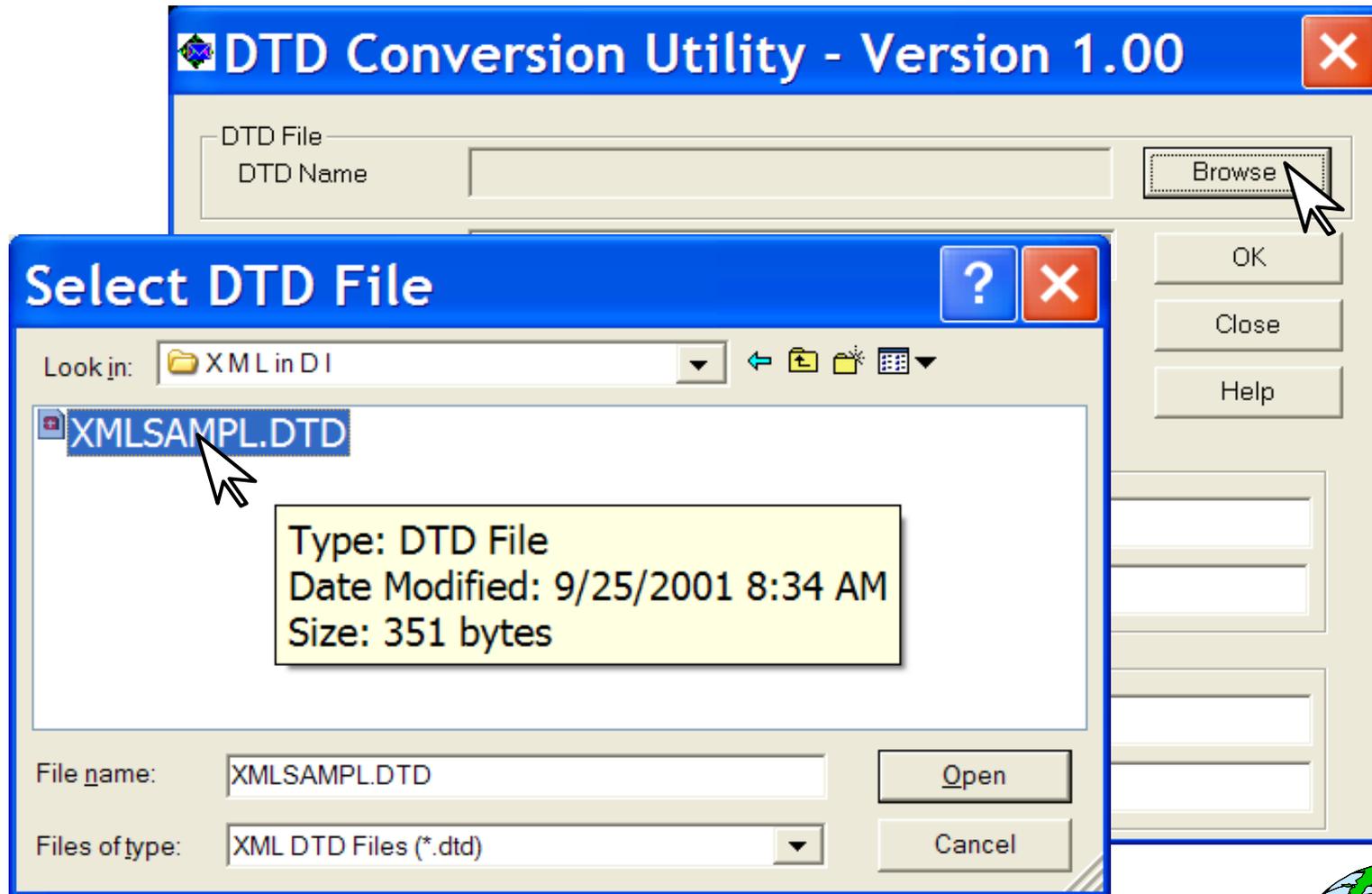
DTD Example



DTD Convert



DTD Convert – Select the DTD File



Enter the Root Element

DTD Conversion Utility - Version 1.00

DTD File
DTD Name: XMLSAMPL [Browse]

Root Element Name: Items

Standard Name: XMLEXAMP

Transaction Name: XMLEXA

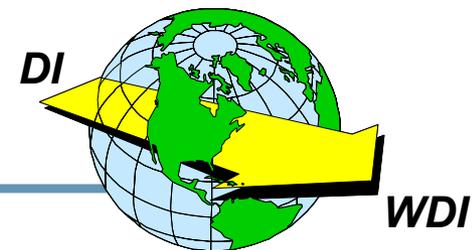
Sender Element
Qualifier: []
ID: []

Receiver Element
Qualifier: []
ID: []

Enter the XML Root Element Name

Defaults to first eight characters of DTD name

Defaults to first six characters of DTD name



Identify Sender/Receiver

DTD Conversion Utility - Version 1.00

DTD File
DTD Name: XMLSAMPL [Browse]

Root Element Name: Items [OK]

Standard Name: XMLEXAMP [Close]

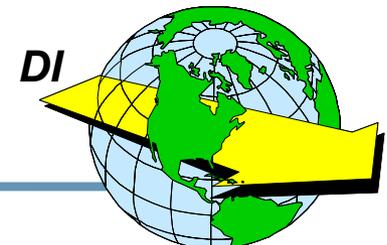
Transaction Name: XMLEXA [Help]

Sender Element
Qualifier: Header\$qual
ID: Header\$id

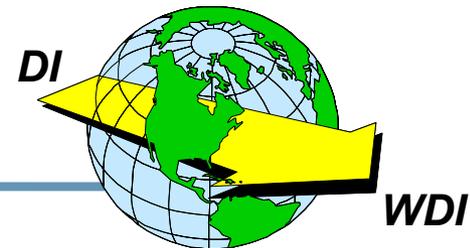
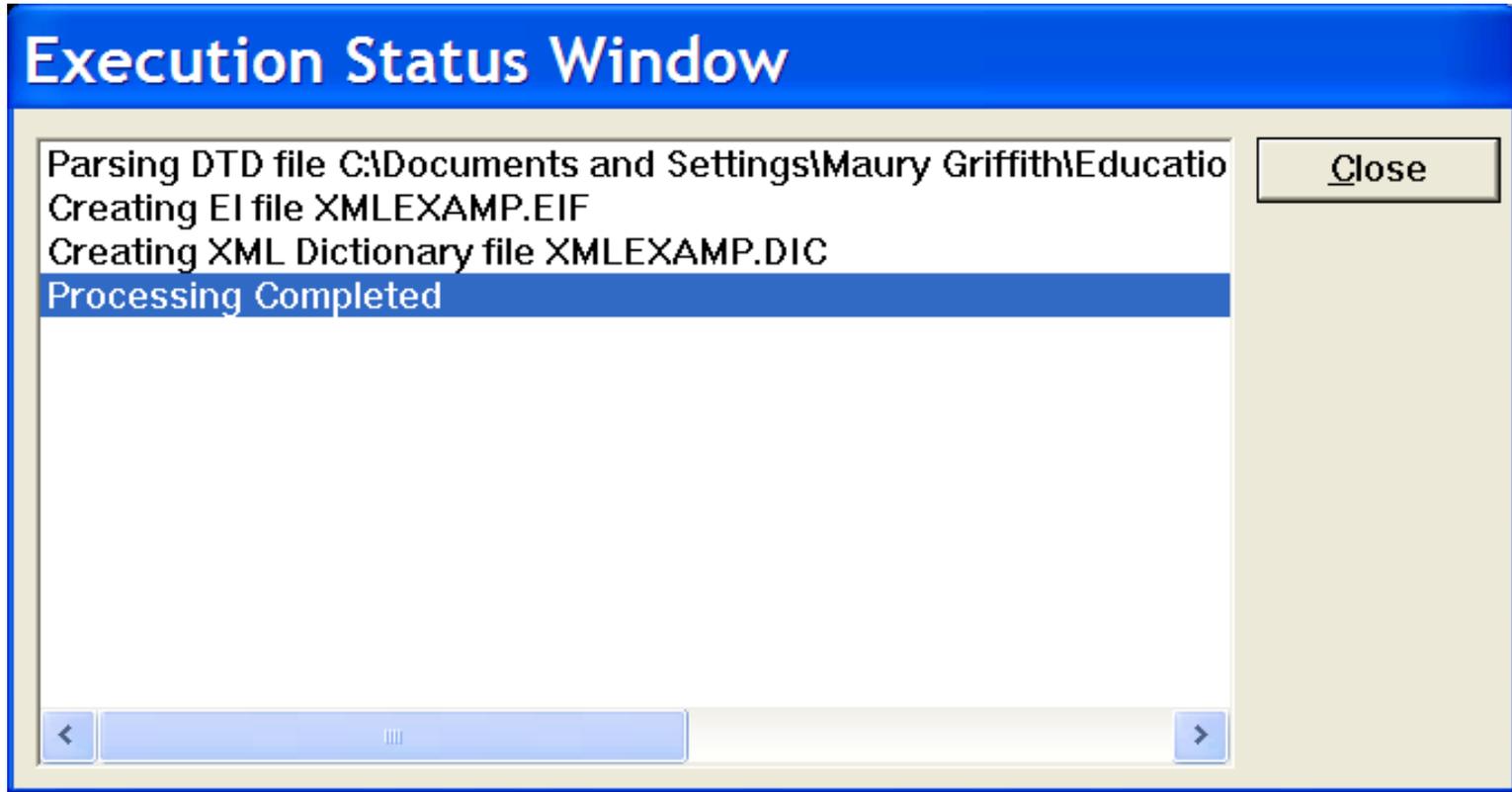
Receiver Element
Qualifier: []
ID: []

When an attribute is used, it is entered as "ELEMENT\$ATTRIBUTE". Defaults to "ZZ".

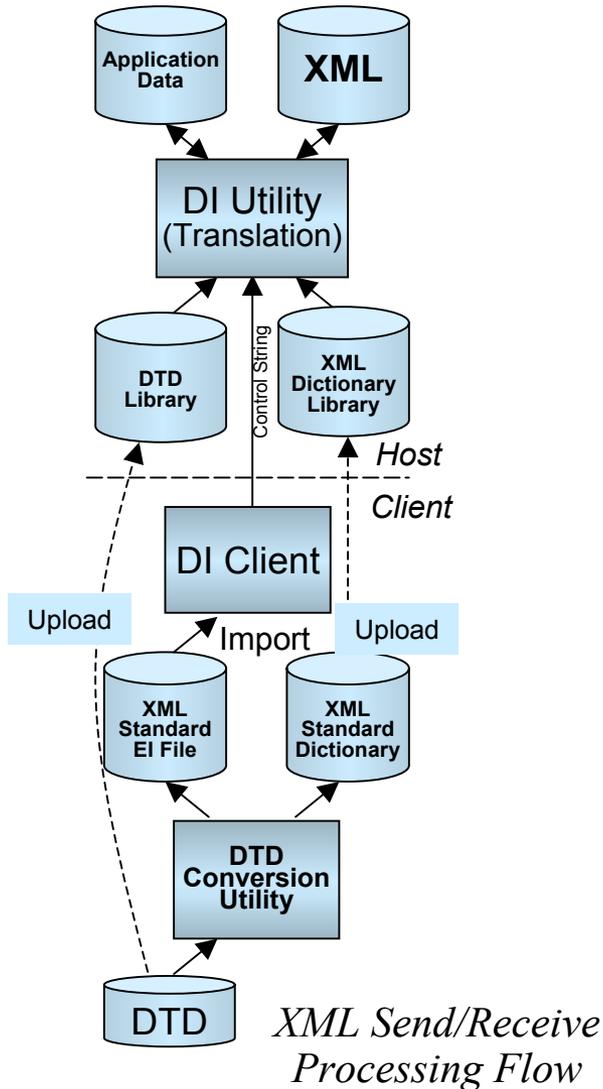
Entered as "ELEMENT" or (in this example) "ELEMENT\$ATTRIBUTE".



DTD Conversion Process



XML Send/Receive Map Processing



PERFORM

(Inbound)

DEENVELOPE

TRANSLATE TO APPLICATION

DEENVELOPE AND TRANSLATE

(Outbound)

ENVELOPE

TRANSLATE TO STANDARD

TRANSLATE AND ENVELOPE

WHERE

XML(Y/N)

XMLVALIDATE(0/1/2)

XMLSTDID(...)

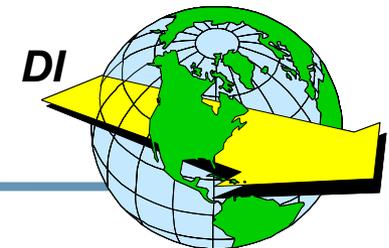
MULTIDOC(S(Y/N)

XMLLEBCDIC(Y/N)

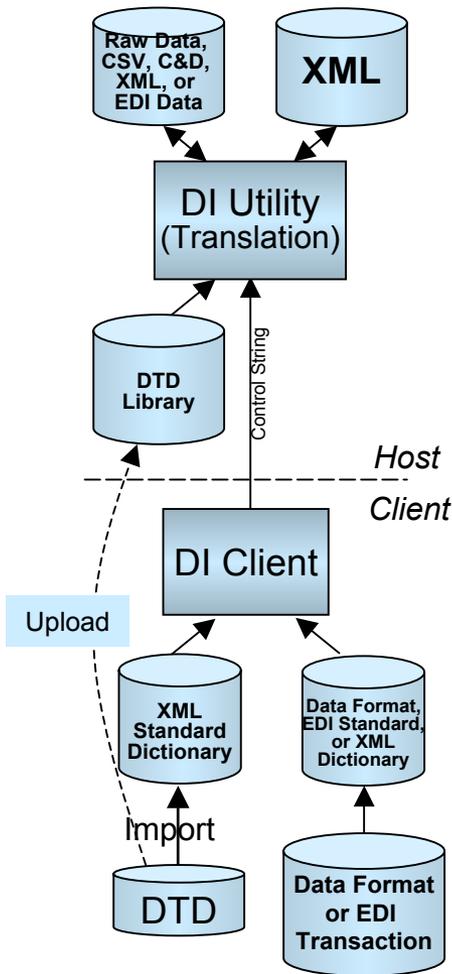
XMLSEGINP(Y/N)

XMLDTDS(...)

XMLDICT(...)



XML Data Transformation Map Processing



XML Data Transformation Processing Flow

PERFORM

TRANSFORM

WHERE

CLEARFILE(clear specified file contents)

DICTIONARY(input dictionary name)

DOCUMENT(input data document name)

IFCC(override condition codes)

INFILE(input data file name)

INTYPE(input data file type)

MAPID(map name)

OUTFILE(output data file name)

OUTLEN(maximum output record length)

OUTTYPE(output data file type)

SETCC(condition codes)

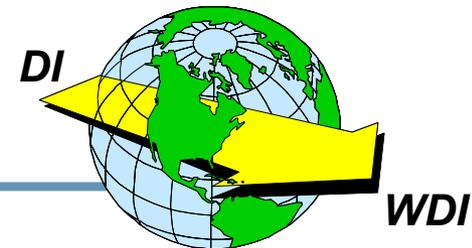
SYNTAX(input data syntax type)

TRACELEVEL(trace level)

XMLEBCDIC(EBDCDIC indicator)

XMLVALIDATE(XML validation indicator)

XMLDTDS(XML DTD path)



Review

- ★ **There are three Dictionary types in the Client:**
Standard Dictionaries, Data Format Dictionaries, and XML Dictionaries
- ★ **XML Dictionaries are used for Data Transformation Mapping.**
- ★ **DTDs are imported into the XML Dictionaries.**
- ★ **XML Dictionaries are not to be confused with the (Mainframe) Dictionary produced by the DTD convert process.**
- ★ **DTD Convert is a separate utility.**
 - You will need to know the Root Element name for the DTD being converted.
 - The DTD is being converted to a DataInterchange standard in Export/Import format.
 - A (Host) Dictionary file is also produced.
 - The standard name may be specified or will default to the first 8 characters of the DTD name.
 - The transaction name may be specified or will default to the first 6 characters of the DTD name.

